



WHITE-RODGERS

ST. LOUIS 23, MO.

MARKHAM, ONTARIO

**- INSTRUCTIONS -
TYPE 1629
REFRIGERATION
TEMPERATURE CONTROL
Selective Range**

This Hydraulic-Action temperature control with **selective range** has been designed to cover a relatively large range, but has provisions on the outside of the control to select a certain portion of the total range of the control for quick, convenient adjustment.

For example, if the control range is 20° to 75°, it is possible to select a smaller range (for instance 32° to 42°) and conveniently adjust to any temperature of that selected range from the external knob.

Type 1629 has a close-on-rise switch action which makes it readily applicable for all types of commercial or industrial refrigeration applications.

PRINCIPLE OF OPERATION

As the temperature rises within the controlled area, the fluid in the bulb expands, forcing the contacts in the switch mechanism to snap closed, turning on the refrigeration system.

As the temperature in the controlled area lowers, this fluid contracts. The contacts snap open when the temperature reaches the control setting, thereby stopping the refrigeration system.

INSTALLATION

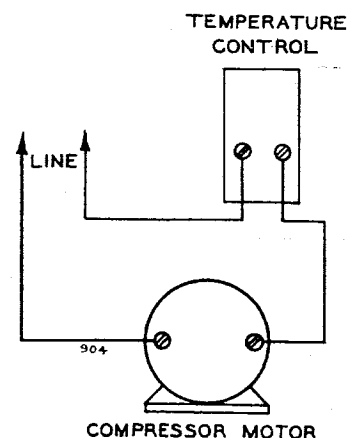
The control may be mounted at any convenient location where the temperature and humidity will not cause a condensation on the contacts.

The bulb or sensitive element should be located so as to be in an **average temperature** of the controlled area. Excess capillary should be coiled conveniently close to the switch mechanism.

WIRING

All wiring should be done according to local and national electrical codes.

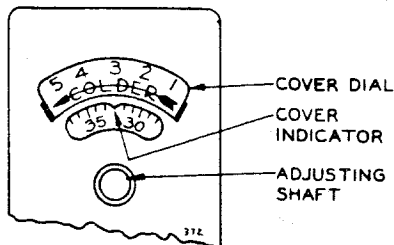
If the manufacturer of the cooling equipment has supplied a wiring diagram, follow such recommendations. If none is offered, this diagram shows the general use of this control.



SELECTING A RANGE

These controls are provided with an internal dial, covering the entire range of the control. The cover has another dial graduated from 1 to 5. The selector knob and this graduated dial are used to select a part of the total range of the control.

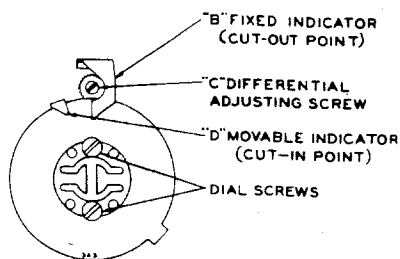
Number 5 on the cover dial represents the lowest temperature, number 1 represents the highest temperature. The selected portion of the internal dial is visible from the outside of the control.



To select a range, proceed as follows:

1. Remove the selector knob by loosening the small set screw in the end of the knob.
2. Turn the adjusting shaft so that the **minimum** desired temperature of the selected range is directly under the cover indicator. For example, if 32° is the **minimum** desired temperature, turn the shaft to set the dial as shown here.
3. Without moving the adjusting shaft, replace the selector knob, pointing it to number 5 on the cover dial.
4. Tighten selector knob in this position.

ADJUSTING



These controls have an adjustable differential. The movable indicator points to the temperature at which the compressor starts. The fixed indicator points to the temperature at which the compressor will stop. The difference between these two indicators is the differential.

To set the control, proceed as follows:

1. Remove the selective knob and take the cover off the control. This exposes the internal dial.
2. Turn the dial so that the fixed indicator "B" points to the temperature at which the compressor is to stop.
3. Turn the differential adjusting screw "C" until the movable indicator "D" points to the temperature at which the compressor is to start.